UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/633,865	08/07/2000	Marco Schneider	P19741	3303

7055 7590 10/21/2005

GREENBLUM & BERNSTEIN, P.L.C.
1950 ROLAND CLARKE PLACE
RESTON, VA 20191

EXAMINER	
PHAN, MAN U	

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/633,865	SCHNEIDER ET AL.	
	Examiner	Art Unit	
	Man Phan	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 August 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 6-60* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-4 and 6-38* is/are allowed.

6)☐ Claim(s) *39-54 and 56-59* is/are rejected.

7)☒ Claim(s) *55 and 60* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8/9/05, 10/7/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

OFFICE ACTION

1. This communication is in response to applicant's 08/09/2005 Amendment in the application of Schneider et al. for a "Multiservice use of network connection capability under user-to-network interface signaling" filed 08/07/2000. This application is a Request for Continued Examination (RCE) under 37 C.F.R. 1.114 filed on August 09, 2005. The proposed amendments to the claims filed 05/09/2005 have been entered and made of record. Claim 5 has been canceled per Applicant's request, and claims 1-4, 6-7, 20 have been amended. Applicant's arguments to the pending claims have been considered but are not persuasive, and will be examined as discussed below. Claims 1-4 and 6-60 are pending in the application.

Drawings

2. The informal drawings are not of sufficient quality to permit examination. Accordingly, replacement drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to this Office action. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action.

Applicant is given a TWO MONTH time period to submit new drawings in compliance with 37 CFR 1.81. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). Failure to timely submit replacement drawing sheets will result in ABANDONMENT of the application.

Claim Rejections - 35 USC ' 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 51-54 are rejected under 35 U.S.C. 1O3(a) as being unpatentable over Clark et al. (US#5,970,064) in view of Chen (US# 6,563,835).

Regarding claims 1 and 6, Clark et al. (US#5,970,064) discloses a switching device with predetermined functions with respect to a request for a predetermined service (Col. 7, line 56 - Col. 8, line 4). Clark disclose a distributed switching system, in which admitting

communications data to each node element in accordance with a set of admission control policy data (Col. 4, lines 7-8). Clark teach in Fig. 2 illustrated schematically a communications network comprising a plurality of node elements and a plurality of link elements, the network controlled by a network controller performing a function of generating admission control policy data (*establishing network connections based on unique identifier and service policy/logic*) (Col. 6, lines 9 plus and col. 8, lines 5-58). Clark further discloses receiving a request from an initiating customer for at least one service (col. -1, lines 56-69). Clark also discloses using policy data to accept or deny service requests (col. 8, lines 5-58), which meets the limitations of establishing a network connection or rejecting a connection based on a policy and logic. Clark discloses that each switch has a connection admission controller (col. 6, lines 48-59), which represents the network connection capability of the present invention.

However, Clark fails to expressly disclose the step of instructing the customer to perform a connection setup request. In the same field of endeavor, Chen discloses a procedure for setting up a network connection that includes the step of a customer performing a connection setup request (see Figure 7). Although Chen does not expressly disclose a unique identifier in the setup message, it is well known in the art that such a message must include such a unique identifier. Otherwise, there would be no way to know for which device the connection was being setup. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to instruct the customer to perform the procedure of Chen after determining to accept a request based on the policy data of Clark. One of ordinary skill in the art would have been motivated to use this procedure to be sure the connection could actually be established in the switch fabric before attempting to make a call.

Regarding claims 52 and 53, Clark discloses a network controller that periodically replenishes the policy data at each switch (col. 10, lines 45-47). The network controller generates new policy data based on data received from the switches (Col. 11, lines 5-9). The network controller or the switches may initiate the policy update (Col. 10, lines 57-67), which represents pushing and pulling the data, respectively.

Regarding claim 54, as stated above, Clark discloses that the switches may initiate a policy update, which meets the limitation of a query.

8. Claims 39-41 and 43-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. (US 5,953,338) in view of Lyon et al. (5,892,924).

Regarding claims 39-41, 44 and 46-50, Ma discloses receiving a request for a network service and basing authorization of the request on a number of factors (col. 7, lines 8-38). Ma discloses a centralized call admission controller (CAC) (145) for authorizing the request which meets the limitation of a service controller, and a bandwidth manager module (150) for creating an authorized connection, which meets the limitation of a network connection capability (see Figure lA). Ma fails to expressly disclose providing a certificate that specifies at least one permitted connection setup. Lyon discloses a protocol in which a particular flow of packets is associated with a particular ATM label, which represents the certificate of the present invention (col. 8, lines 29-37). The label must include a VPI/VCI available on each switch, which meets the limitation of at least one permitted connection setup parameter (col. 8, line 45-49). When a label decision is made, a message is sent upstream to instruct upstream nodes to send packets belonging to that particular flow via the virtual channel specified by the label (col. 8, lines 49-

66). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the label to set up connection requests in the system provided by Ma. It also would have been obvious to receive a label at the bandwidth manager module from the CAC of Ma. One of ordinary skill in the art would have been motivated to use the label in order to switch IP traffic through the network of Ma. One of ordinary skill in the art would have been motivated to provide the bandwidth manager module with the label because the bandwidth manager module is responsible for monitoring and updating all of the assigned virtual connections in the network.

Regarding claim 43, Ma in view of Lyon as described above fails to expressly disclose preventing a repeat use of the label. However, it is well known in the art that two different flows cannot be assigned to the same virtual channel. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to prevent reuse of the labels. One of ordinary skill in the art would have been motivated to do this to prevent mixing of different traffic flows on the same virtual channel.

Regarding claim 45, Lyon discloses that each label has a flow identifier containing a set of header fields that characterize the flow (col. 8, lines 52-54). This meets the limitation of at least one of policy and logic.

9. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. (US#5,953,338) in view of Lyon et al. (US 5,892,924) as applied to claims 39-41 and 43-50 above, and further in view of Hughes et al. (US 5,842,040).

Regarding claim 42, the system provided by Ma in view of Lyon fails to expressly disclose encrypting a certificate. Hughes discloses encryption as a possible ATM network policy (col. 5, lines 29-32). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use encryption for sending labeled flows through the network provided by Ma in view of Lyon. One of ordinary skill in the art would have been motivated to do this to protect sensitive data from security threats.

10. Claim 56 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Ma et al. (US#5,953,338) in view of Chen (US#6,563,835).

Regarding claim 56, Ma discloses receiving a request for a network service and basing authorization of the request on a number of factors (col. 7, lines 8-38). Ma discloses a centralized call admission controller (CAC) (145) for authorizing the request, which meets the limitation of a service controller. Ma also discloses a bandwidth manager module (150) for creating an authorized connection (see Figure 1A). The bandwidth manager module instructs the CAC at specific ATM switches to actually alter, create, destroy, etc. virtual paths (col. 7, lines 26-36). Thus, the network connection capability of Ma encompasses the bandwidth manager module and the CAC in the switches. Ma also discloses that the bandwidth manager module creates virtual paths and channels in accordance with customer contract values for a time of day (col. 13, lines 1 8-58), which meets the limitation of establishing or rejecting a network connection based on at least one of policy and logic. Ma fails to expressly disclose the step of instructing the customer to perform a connection setup request. Chen discloses a procedure for setting up a network connection that includes the step of a customer performing a

connection setup request (see Figure 7). Although Chen does not expressly disclose a unique identifier in the setup message, it is well known in the art that such a message must include such a unique identifier. Otherwise, there would be no way to know for which device the connection was being setup. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to instruct the customer to perform the procedure of Chen after receiving a request from a customer in the network of Clark. One of ordinary skill in the art would have been motivated to use this procedure to be sure the connection could actually be established in the switches before attempting to make a call.

11. Claims 57-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. (US#5,953,338) in view of Chen (US 6,563,835) as applied to claim 56 above, and further in view of Clark et al. (US 5,970,064).

Regarding claims 57 and 58, Ma in view of Chen fails to expressly disclose pushing at least one of- policy and logic onto the network connection capability or pulling at least one of policy and logic from the service controller. Clark discloses a network controller that periodically replenishes the policy data at each switch (col. 10, lines 45-47). The network controller generates new policy data based on data received from the switches (col. 11, lines 5-9). The network controller or the switches may initiate the policy update (col. 10, lines 57-67), which represents pushing and pulling the data, respectively. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to either push policy data onto the network connection capability of Ma in view of Chen, or pull policy data from the centralized call admission controller of Ma in view of Chen. One of ordinary skill in the art

would have been motivated to do this in order to maintain updated policy information for setting up connections across all of the switches in the network.

Regarding claim 59, as stated above, Clark discloses that the switches may initiate a policy update, which meets the limitation of querying a service control module.

Allowable Subject Matter

13. Claims 1-4, 6-38 allowable.

14. Claims 55 and 60 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. The following is an examiner's statement of reasons for the indication of allowable subject matter: The closest prior art of record fails to disclose or suggest a service controller configured to provide service policy and logic associated with the plurality of services in response to service requests initiated by and users; and a proxy device that correlates the service requests with respective services of the plurality of services in response to a network connection request to enable the associated service policies and logic provided by the service controller, and initiates connections to the network via the switch controller based on at least the associated service policy and logic of the requested services. The prior art also fails to disclose the step wherein the instructing further comprises a certificate to be included in the connection setup request; wherein the processing the connection setup request is further based on the certificate;

and wherein the performing one of establishing a network connection and rejecting the connection setup request is in further accordance with the certificate, as recited in the claims.

16. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Donivan (US#6,366,577) is cited to show the method for providing IP telephoney with QoS using end-to-end RSVP signaling.

The Lo et al. (US#2002/0156914) is cited to show the controller for managing bandwidth in a communications network.

The Darland et al. (US#2003/0128698) is cited to show the intelligent services network using a switch controller.

The McConnell et al. (US#6,373,930) is cited to show the method and system for monitoring telecommunications traffic.

The Miyamoto et al. (US#6,618,381) is cited to show the network system and communication node.

The Hemmady (US#6,633,569) is cited to show the system and method for routing data cells through an ATM architecture using quality of service data in a service control point..

The Bala et al. (US#6,542,475) is cited to show the method and system for providing enhanced call service features at remote locations.

The McHenry et al. (US#5,610,969) is cited to show the personal communication service registration system and method.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Phan whose telephone number is (571) 272-3149.

The examiner can normally be reached on Mon - Fri from 6:00 to 3:00 EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at toll free 1-866-217-9197.

Mphan

Oct. 20, 2005

MAN U. PHAN
PRIMARY EXAMINER